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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,421	03/10/2004	Leslie M. Landsberger	14836-8US-1 AD/mb	9040
20988	7590	10/13/2006		
OGILVY RENAULT LLP 1981 MCGILL COLLEGE AVENUE SUITE 1600 MONTREAL, QC H3A2Y3 CANADA			EXAMINER KIM, PAUL D	
			ART UNIT 3729	PAPER NUMBER
DATE MAILED: 10/13/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/796,421

Applicant(s)

LANDSBERGER ET AL.

Examiner

Paul D. Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25, 50-53 and 56-59 is/are pending in the application.
- 4a) Of the above claim(s) 1-16, 50-53, 56, 57 and 59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17, 18, 24, 25 and 58 is/are rejected.
- 7) ☒ Claim(s) 19-23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/10/04, 3/14/05</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This office action is a response to the election of species filed on 8/14/2006.

#### ***Response to the Election of Species***

1. Applicant's election without traverse of Species C, claims 17-25 and 58, in the reply filed on 8/14/2006 is acknowledged.

Claims 1-16, 50-53, 56, 57 and 59 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/14/2006.

#### ***Claim Objections***

2. Claims 17-25 and 58 are objected to because of the following informalities:

Re. Claim 17: The phrase "they are thermally-isolated" as recited in line 4 is not correct. According to the limitation as recited in line 3, there is only one thermally-trimmable resistor. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "one of the plurality of thermally-trimmable resistors" as recited in line 3 lacks antecedent basis.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 17, 18, 24 and 25 and 58 is rejected under 35 U.S.C. 102(b) as being anticipated by Spraggins et al. (US PAT. 5,446,484).

Spraggins et al. teach a process of making a resistor structure comprising steps of: placing a thermally-isolated thermally-trimmable resistor (32) on a substrate (11) as shown in Fig. 1; subjecting the thermally-trimmable resistor to a heat source (62 as shown in Fig. 5) having a power dissipation geometry adapted to obtain a substantially constant temperature distribution across the thermally-trimmable resistor by dissipating more power at the boundaries of a heat-targeted region (such as a portion of the

resistor material, col. 6, lines 27-38) when a temperature of the thermally-trimmable resistor is raised for trimming purposes as shown in Fig. 2 (col. 3, lines 30-46); and trimming the thermally-trimmable resistor using at least one heat pulse (see also col. 6, lines 27-31 and col. 7, lines 4-50).

Re. Claim 58: The thermally-trimmable resistor is formed on a thermally-isolated micro-platform (18), which is formed on the substrate as shown in Fig. 1.

Re. Claim 18: The thermally-trimmable resistor is provided by passing a signal (such as current pulse) through the thermally-trimmable resistor.

Re. Claim 24: Spraggins et al. also teach that the electrical pulses are applied and measured a resistance value of the thermally-trimmable resistor in between each of said plurality of electrical pulses to determine whether a target resistance value has been obtained as shown in Fig. 5 (see also col. 7, lines 4-50).

Re. Claim 25: Spraggins et al. also teach that a dynamically-shaped electrical pulses (such as current pulse) to achieve substantially constant temperature as a function of time during a trimming pulse (see col. 6, lines 27-38).

### ***Allowable Subject Matter***

7. Claims 19-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to disclose the claimed invention such as a process

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of placing a heating resistor on the thermally-isolated micro-platform in close proximity to the thermally-trimmable resistor and supplying more heat around edges of a region in which most of said functional resistor resides in order to counteract a faster heat dissipation in the edges and resulting temperature gradients across the thermally-isolated micro-platform. It is not obvious taken alone or in combination of other references fairly to suggest the claimed invention.

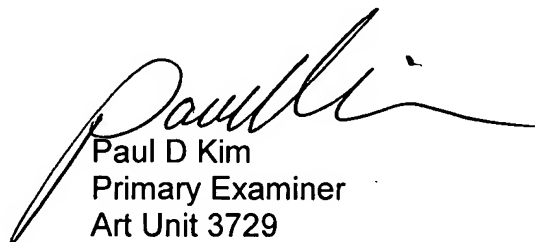
### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D. Kim whose telephone number is 571-272-4565. The examiner can normally be reached on Monday-Thursday between 6:00 AM to 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Paul D Kim  
Primary Examiner  
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